

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Tatsuya UCHIDA et al. : **Mail Stop: PCT**  
Serial No. NEW : Attorney Docket No. 2005\_0344A  
Filed March 2, 2005 :  
CRYSTAL OSCILLATOR  
NANOCHANNEL SENSOR  
[Corresponding to PCT/JP03/11385  
Filed September 5, 2003]

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication;
- ☒ each reference previously cited in the international application PCT/JP03/11385; and/or
- ☐ each reference previously cited in prior parent application Serial No. \_\_\_\_\_.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

ATTACHMENT C

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

DTGS Rec'd PCT/PTO 0 2 MAR 2005

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☒ a foreign patent office (International) search report (in the English language) (Attachment F) submitted herewith,
  - c. ☒ the concise explanation contained in the specification of the present application at page 1,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Tatsuya UCHIDA et al.

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

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March 2, 2005

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## INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: March 2, 2005

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NEW

10/526398

APPLICANT  
Tatsuya UCHIDA et al.FILING DATE  
March 2, 2005

GROUP

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AG	2003-121329 A	4/2003	JP			
	AH						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

AI	Kamisho et al., "Kaimen Kasseizai-Silica Nano Kozotai o Riyo shita Ion Ninshiki", <i>The Japan Society for Analytical Chemistry</i> Dai 50 Nenkai Koen Yoshishu, page 208, November 9, 2001.
AJ	Tanamura et al., "Kagaku Shushokugata Nano Saikotai Sosei to Keiko Puropu o Mochiita Saikotai Kankyo Hyoka", <i>The Japan Society for Analytical Chemistry</i> Dai 49 Nenkai Koen Yoshishu, page 122, September 12, 2000.
AK	Iyoshi et al., "MPS-maku o Hifuku shita QCM no Shitsudo Sensor to shite no Oyo", <i>The Surface Finishing Society of Japan</i> Dai 104 Kai Koen Taikai Koen Yoshishu, pages 15 and 16, September 7, 2001.
AJ	Ikeda et al., "Suisho Shindoshigata Nano Channel Sensor no Kochiku", <i>The Japan Society for Analytical Chemistry</i> Dai 51 Nenkai Koen Yoshishu, page 107, September 5, 2002.
AM	Hongyou Fan et al., <i>Nature</i> , Vol. 405, pages 56 to 60, May 4, 2000.
AN	Hirayama et al., "Bunshi Imprinting-ho ni yoru Lysozyme Chugata no Gosei Oyobi Sono Suisho Shindoshiki Sensor eno Oyo", <i>Bunseki Kagaku</i> , Vol. 49, No. 1, pages 29 to 33, 2000.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop, this form with next communication to applicant.